



Update on Mobile Source Air Pollution Reduction Review Committee's (MSRC) FY Programs in the

South Coast Air Basin

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For information on MSRC programs, go to www.msrc-cleanair.org

MSRC Background

The Mobile Source Air Pollution Reduction Review Committee (MSRC) was formed in 1990 when AB 2766 was signed into law. AB 2766 authorized the collection of a \$4 motor vehicle registration fee, 30% of which funds programs overseen by the MSRC, or approximately \$12 million each year. All programs implemented by the MSRC must fund programs to reduce air pollution from mobile sources pursuant to California Clean Air Act and the local Air Quality Management Plan.

With the primary purpose of the MSRC to administer the discretionary funds, the Bill also specified the MSRC composition and responsibilities, as well as provided for a Technical Advisory Committee (TAC) to assist the MSRC in the development of the annual work programs. The MSRC is also permitted to utilize up to 5% of its annual revenue for purposes of administering the annual work program. Three and a half full time staff are employed by the MSRC, as well as a full time contract Technical Advisor. In addition, the MSRC reimburses the South Coast Air Quality Management District (SCAQMD) for 1,065 staff hours, which provide the MSRC with legal, financial, and contractual assistance.

The following is a list of the MSRC Membership per the Statute, as well as the names and jurisdictions of the existing members:

Member Agency

1. Riverside County Transportation Commission
2. LA County Metropolitan Transportation Authority
3. Southern California Association of Governments
4. Southern California Ride Share
5. San Bernardino Associated Governments
6. Orange County Transportation Authority
7. California Air Resources Board
8. South Coast Air Quality Management District

The MSRC's TAC is comprised of:

Representative

Will Kleindienst, MSRC Chair and Mayor of Palm Springs
Bea LaPisto-Kirtley, MSRC Vice-Chair and Mayor of the City of Bradbury
Bob Bartlett, Mayor of Monrovia
Ron Bates, City of Los Alamitos Council Member
Gwenn Norton-Perry, City of Chino Hills' Council Member
Greg Winterbottom, Alternate Public OCTA Board Member
Sylvia Oey, CARB Staff
Norma Glover, City of Newport Beach Council Member

- ? representatives from each of the above member agencies,
- ? representatives from the Cities of each SCAQMD county,
- ? representatives from the Boards of Supervisors from each SCAQMD County,
- ? the City of Los Angeles,
- ? one or more persons who have academic training and professional expertise in air pollution control, and
- ? a mechanical engineer specializing in vehicle engines

The work programs that the MSRC develops must result in "direct and tangible reductions in vehicle air pollution" and in general, most often includes the following types of projects

- ? transportation control measures (TCMs),
- ? transportation demand management (TDM) strategies,
- ? public information, education and outreach,
- ? alternative fuel and alternative fueled vehicle programs, and
- ? research and monitoring programs

MSRC's Electric Vehicle Programs

In 1995, the MSRC recognized that an important goal towards the reduction of mobile source emissions is to reduce barriers towards the implementation of zero emission vehicles (ZEVs) into the South Coast Air Basin (SCAB). Therefore, the MSRC began to create and deploy a variety of ZEV initiatives and programs. Since the MSRC was the first to develop these types of initiatives, many of these programs have been replicated throughout the State as well as the nation. In general, the type of assistance that the MSRC has provided over the years can be categorized into three areas

1. **Incentives**—including direct financial incentives, rebates and buy downs,
2. **Infrastructure** - including assistance for EV charging stations and signage, and
3. **Coordination/ Outreach**—consisting of surveys, research and development.

The MSRC has had extensive experience in all three of these areas and the work performed to date is described in detail below. The following narratives are also contained in the attached spreadsheet summary.

1. Incentives- \$105Million

Underway

a. Electric Bicycle Assist program has been allocated \$100,000 towards the cost of 400 electric assist bicycles. This program will provide \$250 incentive at the point of sale off the price of an electric bicycle used in lieu of a vehicle. The MSRC will be approving this program in November 2000 and it is anticipated that the incentive will be made available to SCAB residents throughout calendar year 2001.

b. Quick Charge EV Buy Down program provided a \$5,000 incentive to public and private operators, as well as individual owners, to defray the cost to purchase or lease a ZEV. The MSRC has allocated \$68 million for this program, and as of November 2000 approximately \$6 million has been expended towards the purchase/lease of 1,205 ZEVs. The remaining funds of \$.8 million are available through June 30, 2001. Note that given the recent allocation of \$18 million to the Air Resources Board (ARB) through Assembly Bill 2061, the MSRC may consider deobligating these funds and applying these funds to other areas where additional funding is not available. This issue will be discussed and considered at the MSRC's meeting in November 2000.

c. ZEV Purpose Built Buy Down Program: Recognizing that other ZEVs are being built

which do not qualify for the Quick Charge EV Buy Down Program incentives, the MSRC developed a ZEV Purpose-Built Fleet Buy Down Program. This program was introduced through a Program Opportunity Notice, and was open to all fleet operators in the SCAB which purchased/leased a minimum of ten ZEVs. The program resulted in a \$2 million MSRC commitment towards incentivizing 400 EVs at \$5,000 each, for the United States Postal Service. This program is in progress and is anticipated to be completed by June 2008.

d. Home Charging Incentive: The MSRC has teamed up with the State Energy Resources Conservation and Development Commission (CEC) and auto manufacturers to provide incentives for consumers or fleets who utilize the Quick Charge and/or Purpose-Built Fleet Buy Down incentives. Up to \$1,250 is available to defray the cost of installing a charger at one's home or worksite. The CEC administers this program, and to date 230 consumers/fleets have taken advantage of this incentive which will end on June 30, 2001. Out of the \$875,000 the MSRC has allocated to this program, \$747,000 remains. Should the MSRC choose to end its Quick Charge EV Buy Down Program, then the MSRC may also consider suspending this program as well.

e. NEV Demonstration Program: The MSRC has teamed up with the CEC to provide \$200,000 towards a demonstration of neighborhood and city electric vehicles (NEVs and CEVs) within California. Four projects were selected for implementation, two of which are underway within the SCAB. The City of Palm Springs will be deploying 21 NEVs/CEVs demonstrating their use in police, community-based and employee applications. The City of Anaheim will deploy 10 NEVs/CEVs within their community, and also will demonstrate a residential shared use of these vehicles. Both projects are underway and anticipate to be completed by March 2002.

Incentive Projects Completed

f. Local Government Match Program: The MSRC provided a one time 25% match to local jurisdictions when they expended their AB 2766 funds on a variety of transportation control measures, one of which was the purchase/lease of EVs and construction of EV charging station. Through this program, \$565,000 was committed to assist Cities/Counties in implementing their respective EV programs.

2. Infrastructure - \$41 Million

Underway

a. EV Charge: The MSRC awarded \$1.8 million in funding to fund its second round of EV infrastructure, known as EV Charge. As a first come first serve application process, the most desirable projects were those which filled in major corridors and gaps in the current ZEV network. Applicants were eligible to receive anywhere between a 40% cost share (if the site is a fleet provider and not accessible to the public) up to a 90% cost share (if the site fills a gap and is a major destination). In total 97 applicants were approved funding for the construction of 164 inductive and 120 conductive chargers at 123 locations. Of these locations, 113 are complete and the balance will be completed by the Summer of 2001.

b. EV Charge Signage Installation: In the EV Charge application process, applicants were allowed to receive 100% reimbursement for all signage costs. Signs were required on the property that the EV Charging station is located; and signage was highly recommended on local streets and roads as well as freeways, should there be at least one inductive and one conductive charger and the site and the site must be open to the public.

In the end, \$2 million was awarded towards the installation of signs at 19 public EV charging locations. To date, two of these locations have installed signage and signage for the remaining 17 locations will be completed by the Summer of 2001.

Infrastructure Projects Completed

c. Quick Charge EV Charging Station: Another element of the Quick Charge program was to develop the infrastructure necessary to support the use of ZEVs. For this first infrastructure program, the MSRC chose to work directly with four government entities (one in each county of the SCAB) and then in turn have each of the County Agencies work directly with the various sites. This first round of infrastructure development focused primarily on government installations, in that the MSRC believed that the EV program first needed government buy in and commitments. In the end, Quick Charge funded 111 EV charging station locations throughout the air basin, which included 205 inductive and 151 conductive chargers. It was through this program that the Stakeholders agreed upon the Avcon connector for the conductive chargers as well as required for public sites a minimum of one inductive and one conductive charger. Over \$1.6 million of MSRC funding was allocated towards these projects and all charging stations are constructed and in operation.

d. Quick Charge Signage Installation: The MSRC has taken the lead in installing signs on freeways and roads, alerting motorists to the locations of public charging stations. Each sign has a word message: "Electric Vehicle Charging Station" and provides arrows and directions to the site. \$260,912 was expended towards the construction of signage at 85 public EV Charging stations funded from Quick Charge in Los Angeles, Orange, San Bernardino and Riverside counties, with a minimum one inductive and one conductive charger exists.

3. Coordination/ Outreach – \$300,000 – All Projects Complete

a. Quick Charge Oversight and Signage Development: In preparation of the Quick Charge Buy Down Program and the Infrastructure program, the MSRC expended \$175,000 towards a consultant to assist in the implementation. In addition, this consultant was also asked to begin the development of a signage program, so that EV drivers can be easily directed to charging stations. Based on extensive research and approval from the State Department of Transportation (Caltrans) a word message for the signs and preliminary EV Charging Station Guidelines were developed and were the basis for signage implementation later on.

During the Quick Charge Program, the MSRC developed guidelines for the installation of EV charging station signage as well as funded signage for 85 Quick Charge locations. This document is crafted to assist site owners and other interested parties in installing EV directional signage on streets and roads for future charging stations.

b. EV Charge Development and Strategic Plan: Prior to beginning a call for projects for the second round of funding EV infrastructure, the MSRC wanted to complete analysis on the system to date. Extensive research was performed to gather data from EV charging station site owners, stakeholders, drivers and other sources. With this information, the MSRC was able to compile a first ever strategic plan, of where the next round of Government funding should go. In addition, several barriers were identified and the new program attempted to address those barriers. The program that was developed, EV charge, targeted the placement of charging stations at major destinations and places that EV drivers found desirable to spend one hour or more while their vehicles were charging. The program also proposed to fund signage installation 100%

and required each site owner to propose/adopt enforcement for parking, and gave additional bonus points to joint submittals and stations that were made publicly accessible. In addition, the MSRC made this application available on the internet.

c. General Outreach: With the variety of programs implemented by the MSRC as well as individual efforts by the auto manufacturers, utilities, and other partners, the MSRC recognized that additional outreach is still needed to bring these programs together and to provide more effective marketing and outreach to consumers. The MSRC has conducted three surveys over the past few years, one prior to the introduction of EVs and two of which were surveys asking current EV drivers information about their driving patterns. These surveys as well as many other outreach efforts are addressed on the MSRC website at www.msrc-cleanair.com.

What's Next?

All of the above-described programs in progress should be completed by 2003. The MSRC will begin crafting its FY 2001/2002 work program in the spring of 2001. At that time, the MSRC will consider additional needs for the EV programs and may allocate funds to those programs in the next funding cycle. Even though the ZEV mandate has been maintained and reaffirmed by ARB, there is still a gross lack of full size EVs available for fleets and consumers. Until the product availability improves, there may be less of a need in this air basin to allocate additional funds towards these programs. In the meantime, the MSRC will continue to finish its existing projects as well as research and investigate potential projects for upcoming work programs.

Summary

The MSRC has allocated approximately \$15 million towards programs and projects which have assisted the introduction of ZEVs into the Air Basin. The region has been fortunate to have the MSRC defined in Statute and to have a dedicated funding source and revenues which implement programs to reduce mobile source emissions. Even though the MSRC is not a legal entity, but rather is composed of a variety of locally elected officials and staff volunteers from member agencies, the Committee has been extremely effective in reducing or eliminating barriers to the introduction of EVs into the air basin.

Thanks

MSRC Staff has been instrumental in gathering this information and overseeing these programs. Ray Gorski, Matt MacKenzie, Lillia Miranda, Phil Yenovkian, and Drue Ramirez. The MSRC-TAC also has a ZEV Subcommittee which also has been instrumental in implementing these programs and those members are: Michelle Kirkhoff, Chair (SAN BAG), Dave Ashurkian (CEC), Melinda Bowman (County of Orange), John Cox (SCAG), Marilyn Williams (RCTC), Dave Cowardin (County of LA), and Lisa Mirisola (SCAQMD).

Lastly, I would like to recognize the SCAQMD staff who work hard to keep the MSRC programs well coordinated, and those staff are Nancy Covey, Jeri Voge, Mel Zeldin and Chung Liu.

These programs could not have been implemented without the individual efforts of all these great people.

Documents Available From The MSRC

Documents are available when you provide your name, agency, address, phone to:
info@msrc-cleanair.org.

Some of these documents are available on line at www.msrc-cleanair.org.

Information/ Material	Date Compiled	Conducted By	Content
EV Charging Station Signage Guidelines	December 1997	The Planning Center	Guidelines for the installation of directional signage on freeways and roads, directing motorists to EV charging stations; Caltrans' approved signage dimensions & standards are included
Southern California EV Charging Infrastructure Study	January 1998	CalEITC oversight; Work performed by Consumer Insights Inc.	Survey responses from 2,229 residents in the SCAB and San Diego, gathering information about their interest in EVs and opinions about the impact of public charging in their purchase consideration
1998 EV Owner Survey	August 1998	MSRC Staff and MSRC-TAC	Survey of 100 EV owners in the SCAB, asking them questions about their driving behaviors, patterns, and charging station behavior
2000 EV Owner Survey	May 2000	MSRC, CalEITC, Air Districts and The Planning Center	Survey of 301 EV owners in California, asking them questions about their driving behaviors/patterns, and their perspective on driving an EV
EV Charge EV Stakeholder Interviews	September 1998	The Planning Center and BKI	Interviews with key stakeholders in the regions, asking them about EV successes and failures, infrastructure and incentives
EV Charge Strategic Plan	December 1998	The Planning Center	Review of all materials to date, upon which to build the next phase of EV infrastructure for the Region
Quick Charge Signage Plan and Recommendations	January 1998	The Planning Center	Proposed exact signage locations for 85 sites funded under Quick Charge
Summary of Quick Charge and EV Charge Locations	November 1999	The Planning Center	List of sites of MSRC-funded EV Charging stations, as well as maps of the locations